

Amendments to the Specification:

Please replace paragraph [0001] with the following amended paragraph:

[0001] The invention relates to a method ~~for detecting a differential pressure or for~~ correcting a pressure value detected in a fluid on the basis of a pressure of a surrounding medium, as well as to a pump system with a level sensor and to the use of a pressure sensor in a corresponding pump system.

Please replace paragraph [0003] with the following amended paragraph:

[0003] It is therefore the object of the invention to provide an improved method ~~for detecting a differential pressure or for~~ correcting a pressure value detected in a fluid on the basis of a pressure of a surrounding medium, as well as a corresponding pump system which permit a simplified construction of the pump system.

Please replace paragraph [0005] with the following amended paragraph:

[0005] The method according to the invention serves ~~for detecting a differential pressure or for~~ correcting a pressure value detected in a fluid on the basis of the pressure of a surrounding medium, wherein with this, there is formed a pressure difference between a first pressure value and a second pressure value, for example, of the surrounding medium. According to the invention at one point in time a first pressure value and at another point in time a second pressure value is detected. Subsequently the second pressure value is corrected on the basis of the first pressure value, wherein preferably a pressure difference between the two detected pressure values is evaluated. This method according to the invention thus allows a pressure sensor to detect absolute values only, but at two different points in time, in order to determine a pressure difference. Thus a differential pressure sensor which is impinged on two sides may be done away with. The method according to the invention permits the evaluation of a pressure difference with a

sensor impinged on one side. This has the further advantage that in such a sensor which usually comprises a membrane, the detection electronics may be arranged on a side of the membrane which is not impinged by pressure. This simplifies the insulation or sealing of the electronics with respect to the fluid in which the pressure is to be determined. A simplified sensor construction is thus possible.

Please replace paragraph [0007] with the following amended paragraph:

[0007] ~~Preferably there~~ There is provided at least one pressure sensor serving as a level sensor in a submersible pump and at the one point in time the pressure of the surroundings and at the other point in time the pressure of the fluid to be delivered by the pump is detected. This embodiment of the method permits the design of a simplified level sensor for a pump. It is no longer necessary to apply a pressure sensor impinged on both sides which is simultaneously impinged by the pressure of the surroundings and by the pressure of the fluid to be delivered, and to determine the height of the fluid level via the measured differential pressure. According to the invention one may apply a pressure sensor impinged on one side, wherein the pressure of the surroundings and the pressure of the fluid to be delivered by the pump may be determined at two different points in time. This method may preferably be used where pressure changes of the surroundings occur slowly. This is the case with pumps, since the atmospheric pressure of the surroundings changes relatively slowly whilst the pressure of the fluid to be delivered may rapidly change due to the rapid changes of the fluid level. Due to the slow changes of the pressure of the surroundings a continuous detection of the pressure of the surroundings for correcting the fluid pressure is not necessary. It is sufficient to detect the pressure of the surroundings at predefined points in time and subsequently to correct the continuously determined fluid pressure by this previously detected value. The detection of the pressure of the surroundings and of the pressure of the fluid to be delivered may for example be effected by one and the same sensor. For this the sensor may be connected to the fluid and the surrounding medium or to the surroundings via tube conduits in order to determine the pressure of the fluid and of the surrounding medium or surroundings alternately or in

succession. For this one may provide suitable switch valves in the tube conduits in order to impinge the pressure sensor alternately with the fluid pressure and with the pressure of the surrounding medium.

Please replace paragraph [0012] with the following amended paragraph:

[0012] For this the fluid level after reaching the level of the pressure sensor is preferably further lowered during a predefined period of time. Thus a pump may, for example, be controlled such that after reaching the level of the pressure sensor it still runs for a predefined time duration so that it is ensured that the pressure sensor is laid free for determining the pressure of the surrounding medium.

Please replace paragraph [0014] with the following amended paragraph:

[0014] Preferably, the pump is switched off after reaching the level of the pressure sensor after completion of the predefined period of time or on reaching a predefined fluid level below the level of the pressure sensor. It is thus ensured that a pump sump is not pumped completely empty also during the evaluation of the pressure of the surrounding medium, and in particular that the pump does not run dry, which could make a restart of the pump at a later point in time more difficult or even prevent this. It is ensured that the suction port of a pump is always situated below the fluid level.

Please replace paragraph [0036] with the following amended paragraph:

[0036] Fig. 2 shows a diagram which corresponds to Fig. 1 and which illustrates a further condition in which no measurement of the pressure of the surroundings has been carried out. As described by way of Fig. 1, firstly the fluid level is lowered by starting the pump, which is detected by the pressure sensor which emits a signal level 2. At the point in time T_1 the signal 2 in the vicinity of the level S_2 of the sensor remains constant. This causes the control means firstly to assume that the level S_2 is reached or fallen short of, so

that the sensor is pumped free. As a result it now evaluates, as explained by way of Fig. 1, the interval t_1 in which the pump must continue to run in order to lower the fluid level by the predefined amount h_1 . The pump is switched ~~of~~off after completion of the period of time t_1 . In the case shown in Fig. 2 now after completion of the interval t_1 the signal directly increases again. The signal level 2 thus does not remain constant for a period of time $t_2 > t_{2min}$. From the direct increase again of the signal level one may now conclude that indeed the liquid level has not been lowered below the level S_2 but that merely an admission into the pump sump has corresponded exactly to the quantity of fluid or liquid pumped away by the pump so that the signal level 2 was constant in the interval t_1 . Due to the increase again of the signal level 2 before completion of the period of time t_{2min} the control means now recognizes an error and does not carry out an evaluation of the pressure of the surroundings, but again starts the pump in order to start the described procedure from the beginning and to determine the pressure of the surroundings.

Please delete paragraph [0038].